AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A connector assembly useful for ~~use in~~ making an anastomotic connection between an opening prepared at an end of a graft tissue conduit and an aperture in a side wall of a body tissue conduit in a patient, said connector assembly comprising: a body disposed annularly about a longitudinal axis and having axially spaced distal and proximal portions, the distal portion having an annular element comprising a graft retention component to secure the tissue of the graft tissue conduit about the opening to the connector assembly ~~and a hinge joint~~, and the proximal portion having a plurality of annularly spaced body fingers that expand radially out to engage the interior surface of the side wall of the body tissue conduit about the aperture~~; and an outside retention element configured to annularly engage the exterior surface of the graft tissue conduit about the opening, wherein the outside retention element is hingedly coupled to the distal portion of the body by the interaction of hinge eyelets of the outside retention element with the hinge joint~~.

2. **(Original)** The connector assembly defined in claim 1, wherein the graft retention component comprises an annular inside-retention element configured to engage the interior surface of the graft tissue conduit about the opening.

3. **(Currently Amended)** The connector assembly defined in claim 1, wherein the ostium diameter of the anastomotic connection is ~~2, wherein the annular inside retention element has a cross sectional area~~ larger than the cross-sectional area of the graft tissue conduit.

4. **(Original)** The connector assembly defined in claim 2, wherein the annular inside-retention element is unitary with the distal portion of the body.

5. **(Original)** The connector assembly defined in claim 2, wherein the annular inside-retention element is coupled to the distal portion of the body.

6. **(Original)** The connector assembly defined in claim 2, wherein the annular inside-retention element includes a plurality of annularly spaced inside-retention members that have free ends configured to engage the interior surface of the graft tissue conduit about the opening.

7. **(Canceled)**

8. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element comprises a plurality of annularly spaced outside-retention members.

9. **(Canceled)**

10. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element is rigidly connected to the distal portion of the body.

11. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element is slidably coupled to the distal portion of the body.

12. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element is further configured to engage the exterior surface of the body tissue conduit about the opening.

13. **(Currently Amended)** The connector assembly defined in claim 44 [[6]], wherein the outside-retention element is configured to be at least partially proximal to the plurality of inside-retention members.

14. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element is configured to be at least partially in the same plane as the inside-retention element.

15. **(Currently Amended)** The connector assembly defined in claim 44 [[1]], wherein the outside-retention element is a substantially annular expandable band configured to pass annularly about the plurality of inside-retention members from a first position distal to the plurality of inside-retention members to a second position at least partially proximal to the plurality of inside-retention members.

16. **(Original)** The connector assembly defined in claim 15, wherein the connector assembly further comprises a collar configured to prevent the band from expanding when in said second position.

17. (**Original**) The connector assembly defined in claim 1, wherein the radially outward expansion of the plurality of annularly spaced body fingers is an elastic bending.

18. (**Original**) The connector assembly defined in claim 1, wherein the body has a medial portion between the proximal portion and the distal portion, wherein the medial portion includes at least one torsional element.

19. (**Original**) The connector assembly defined in claim 1, wherein the opening is prepared by a length-wise axial incision from a toe point at the end of the graft tissue conduit to a heel point along the length of the graft tissue conduit.

20. (**Original**) The connector assembly defined in claim 1, wherein the opening is prepared by an incision oblique to the longitudinal axis of the graft tissue conduit from a toe point at the end of the graft tissue conduit to a first point along the length of the graft tissue conduit followed by a length-wise axial incision from the first point to a heel point further along the length of the graft tissue conduit.

21-34. (**Cancelled**)

35. (**Currently Amended**) Apparatus <u>useful</u> for producing the anastomotic connection between the opening prepared at the end of the graft tissue conduit and the aperture in the side wall of the body tissue conduit in the patient comprising:

<u>(1)</u> the connector assembly defined in claim 1; and

<u>(2)</u> a delivery tool having a first configuration and a second configuration, wherein the first configuration is configured for deforming the proximal portion of the connector assembly from an expanded configuration to a deformed configuration and to advance the deformed proximal portion of the connector assembly into the lumen of the body tissue conduit via the aperture, and wherein the second configuration is configured for un-deforming the proximal portion of the connector assembly in the lumen of the body tissue conduit.

36. (**Previously Presented**) The apparatus defined in claim 37, wherein the loading tool is external to a cannulation of the connector assembly.

37. **(Previously Presented)** The apparatus defined in claim 35, further comprising a loading tool having a body portion, wherein the body portion is configured to support the distal portion of the connector assembly and to define the resulting shape of the anastomotic connection external to the body tissue conduit.

38. **(Previously Presented)** The apparatus defined in claim 37, wherein the loading tool further comprises at least one tissue holder configured to engage the exterior surface of the graft tissue conduit about the opening and to hold the graft tissue conduit about the graft retention component of the connector assembly.

39. **(Previously Presented)** The apparatus defined in claim 35, wherein the graft retention component comprises an annular inside-retention element configured to engage the interior surface of the graft tissue conduit about the opening.

40. **(Currently Amended)** The apparatus defined in claim 35, wherein the ostium diameter of the anastomotic connection is ~~37, wherein the annular inside-retention element has a cross-sectional area~~ larger than the cross-sectional area of the graft tissue conduit.

41. **(New)** The connector assembly defined in claim 1, wherein said annular element has a fixed cross-sectional area.

42. **(New)** The connector assembly defined in claim 41, wherein said fixed cross-sectional area defines a round, oval, or any other substantially smooth shape.

43. **(New)** The connector assembly defined in claim 1, wherein said graft retention component is a fixed part of the annular element, or is connected to the annular element.

44. **(New)** The connector assembly defined in claim 2, wherein the connector assembly further comprises an outside-retention element configured to annularly engage the exterior surface of the graft tissue conduit about the opening.

45. **(New)** The connector assembly defined in claim 44, wherein the outside-retention element is hingedly coupled to the distal portion of the body.

46. (**New**) The apparatus defined in claim 35, wherein the connector assembly further comprises an outside-retention element configured to annularly engage the exterior surface of the graft tissue conduit about the opening.

47. (**New**) The apparatus defined in claim 35, wherein said annular element has a fixed cross-sectional area.

48. (**New**) The connector assembly defined in claim 1, wherein the connector assembly is constructed of nitinol, tantalum, tungsten, stainless steel, platinum, silicone, or polyurethane.

49. (**New**) The connector assembly defined in claim 2, wherein the annular inside-retention element is constructed of nitinol, tantalum, tungsten, stainless steel, platinum, silicone, or polyurethane.

50. (**New**) The connector assembly defined in claim 44, wherein the outside-retention element is constructed of nitinol, tantalum, tungsten, stainless steel, platinum, silicone, or polyurethane.

51. (**New**) A method of producing an anastomotic connection between an opening prepared at an end of a graft tissue conduit and an aperture in a side wall of a body tissue conduit in a patient, the method comprising:

(1) securing the tissue of the graft tissue conduit about the opening to the graft retention component of the distal portion of the connector assembly of claim 1;

(2) deforming the plurality of annularly spaced body fingers at the proximal portion of the connector assembly, and approximating the opening and the aperture so that the proximal portion of the connector assembly extends into the body tissue conduit via the aperture;

(3) un-deforming the proximal portion so that the plurality of annularly spaced body fingers expand radially out to engage the interior surface of the side wall of the body tissue conduit about the aperture.

52. (**New**) The method of claim 51, wherein the securing comprises: positioning the graft tissue conduit so that the interior surface of the graft tissue about the opening engages a

plurality of annularly spaced inside-retention members of the graft retention component; and positioning an outside-retention element of the connector assembly to engage the exterior surface of the graft tissue about the opening at least partially proximal to the plurality of annularly spaced inside-retention members.

53. (New) The method of claim 52, wherein the securing further comprises: before the positioning the graft tissue conduit, providing a loading tool having a body portion configured to hold the distal portion of the connector assembly to define the resulting shape of the anastomotic connection external to the body tissue conduit.

54. (New) The method of claim 51, wherein the deforming comprises: providing a delivery tool with a noose threaded through an eyelet provided by each of the body fingers; and tightening the noose so that each body finger is variably constrained radially from a fully undeformed configuration to a fully deformed configuration.

55. (New) The method of claim 54, wherein the approximating comprises: advancing the delivery tool so that the plurality of body fingers extend into the body tissue conduit via the aperture.

56. (New) The method of claim 54, wherein the undeforming comprises: releasing the noose.

57. (New) The method of claim 54, wherein the delivery tool does not cannulate the connector assembly or the graft tissue conduit.

58. (New) The method of claim 51, wherein the ostium diameter of the anastomotic connection is larger than the cross-sectional area of the graft tissue conduit.

59. (New) The method of claim 51, wherein said anastomotic connection takes off at an angle that is not tangential or perpendicular.

60. (New) The method of claim 51, wherein the opening is prepared by a length-wise axial incision from a toe point at the end of the graft tissue conduit to a heel point along the length of the graft tissue conduit.

61. (New) The method of claim 51, wherein the opening is prepared by an incision oblique to the longitudinal axis of the graft tissue conduit from a toe point at the end of the graft

tissue conduit to a first point along the length of the graft tissue conduit followed by a length-wise axial incision from the first point to a heel point further along the length of the graft tissue conduit.